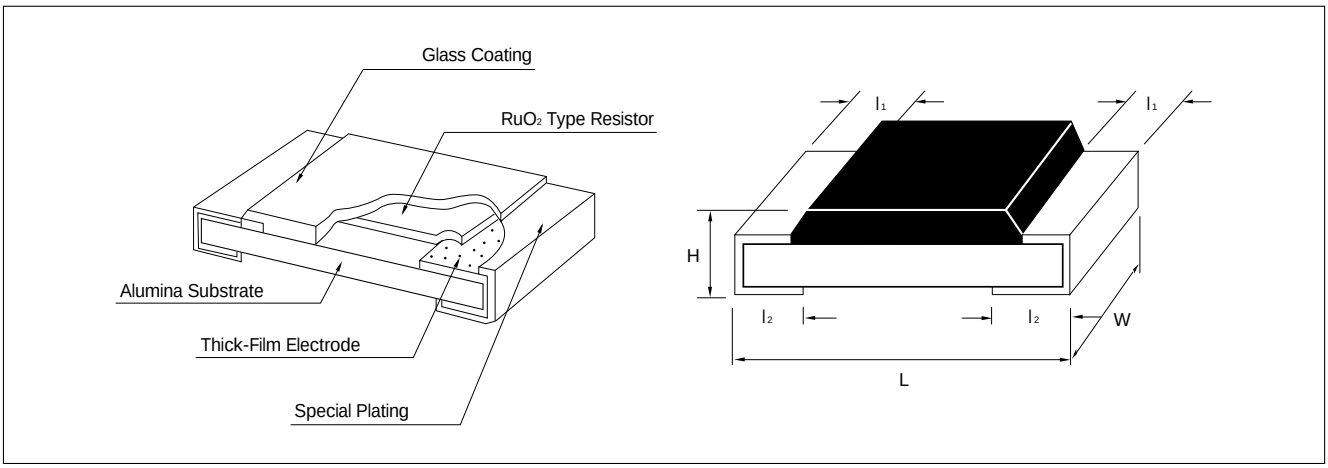
查询RC1005供应商

STRUTURE AND DIMENSIONS



(UNIT : mm)

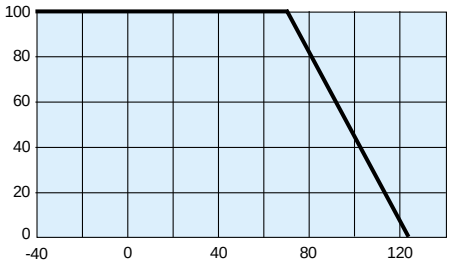
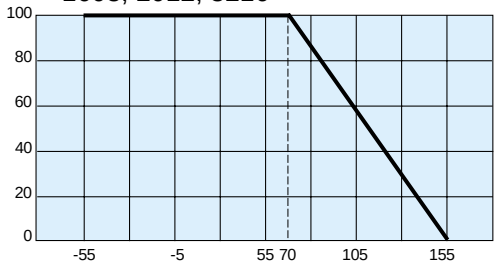
Type	L	W	H	l_1	l_2
RC1005(1/16W)	1.00±0.05	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
RC1608(1/10W)	1.60±0.10	0.80±0.15	0.45±0.10	0.30±0.20	0.35±0.10
RC2012(1/8W)	2.00±0.20	1.25±0.15	0.50±0.10	0.40±0.20	0.35±0.20
RC3216(1/4W)	3.20±0.20	1.60±0.15	0.55±0.10	0.45±0.20	0.40±0.20
RC3225(1/4W)	3.20±0.20	2.55±0.20	0.55±0.10	0.45±0.20	0.40±0.20
RC5025(1/2W)	5.00±0.15	2.50±0.15	0.55±0.15	0.60±0.20	0.60±0.20
RC6432(1W)	6.30±0.15	3.20±0.15	0.55±0.15	0.60±0.20	0.60±0.20

PARTS NUMBERING SYSTEM

RC	2012	J	100	CS
1	2	3	4	5
Code Designation	Dimension (mm)	Resistance Tolerance	Resistance Value	Packaging Code
Chip Resistor -RC :Glass Coating -RH :Polymer Epoxy Coating	1005 : 1.0×0.5 1608 : 1.6×0.8 2012 : 2.0×1.25 3216 : 3.2×1.6 3225 : 3.2×2.55 5025 : 5.0×2.5 6432 : 6.4×3.2	D : ±0.5% F : ± 1 % G : ± 2 % J : ± 5 % K : ±10%	1st two digits represents Significant figures. The last digit represents the number of zeros. Jumper chip is represented as 000	AS : Tape Packaging. 13” CS : Tape Packaging. 7” ES : Tape Packaging. 10” BS : Bulk Packaging.

Resistance Value Marking
3 or 4 digit coding system. (IEC Coding System)

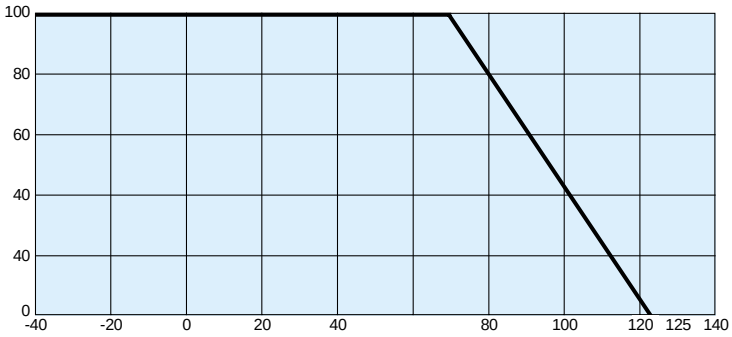
GENERAL SPECIFICATION

Description	RC1005	RC1608	RC2012	RC3216	RC3225	RC5025	RC6432
Power Rating (W) at 70℃	0.063W	0.10W	0.125W	0.25W	0.25W	0.5W	1W
Power Derating Curve	 ■ 1608, 2012, 3216  The rated power is the maximum continuous loading power at 70℃ ambient temperature. For ambient temperature's above 70℃ the loading power follows the above power derating curve.						
Rated Voltage	$\sqrt{\text{Rated power(w)} \times \text{Normal resistance value (W)}}$						
Working Voltage (Max)	50V	50V	50V	150V	200V	200V	200V	200V
Overload Voltage (Max)	100V	100V	100V	300V	400V	400V	400V	400V
Resistance Range	(UNIT : Ω)							
D(±0.5%)	-	10~1M	10~1M	10~1M	10~1M	-	-	-
F(±1%), G(±2%)	10~1M	10~1M	10~1M	10~1M	10~1M	10~1M	10~1M	10~1M
J(±5%)	10~1M	1~10M	1~10M	1~10M	1~10M	1~10M	1~10M	1~10M
K(±10%)	10~1M	1~10M	1~10M	1~10M	1~10M	1~10M	1~10M	1~10M
Jumper Chip	50 mΩ max							
Operating Temperature Range	-55℃ ~ 125℃ -55℃ ~ 155℃(For 1608, 2012, 3216)							
Rated Temperature Range	70℃							

Temperature Coefficient	Resistance Tolerance	Resistance Range	Temperature Coefficient
	J (±5%) K (±10%)	1Ω ≤R≤10MΩ	±(300/200) PPM/℃
		10Ω ≤R<1MΩ	±100 PPM/℃
		1MΩ ≤R<10MΩ	±3 00 PPM/℃
	G (±2%) F (±1%) D (±0.5%)	10Ω ≤R<1MΩ	±100 PPM/℃

* Please specify wattage when power rathing at the mark(*) is required at the time of ordering.

SPECIFICATION IN THE LOW RESISTANCE RANGE

Description	RC2012	RC3216	RC3225	RC5025	RC6432
Power Rating (W) at 70℃	0.10W	0.125W *0.25W	0.25W	0.5W	1W
Power Derating Curve	POWER Derating Curve  The rated power is the maximum continuous loading power at 70℃ ambient temperature. For ambient temperature's above 70℃ the loading power follows the above power derating curve.				
Rated Voltage	$\sqrt{\text{Rated power(w)} \times \text{Normal resistance value (W)}}$				
Working Voltage (Max)	50V	100V	200V	200V	200V
Overload Voltage (Max)	100V	200V	400V	400V	400V
Resistance range	(UNIT : Ω)				
F(±1%) G(±2%) J(±5%) K(±10%)	0.2Ω ~ 0.91Ω (E24 Series)				
Operating temperature range	-55℃ ~ 125℃				
Rated Ambient Temperature	70℃				

Temperature Coefficient	Resistance Tolerance	Resistance Range	Temperature Coefficient
	F(±1%)	0.2Ω ≤R≤1Ω	±200 PPM/℃
	G(±2%)	0.2Ω ≤R≤1Ω	±200PPM/℃
	J(±5%)	0.2Ω ≤R≤1Ω	±(600/300)PPM/℃
	K(±10%)	0.2Ω ≤R≤1Ω	±(600/300)PPM/℃

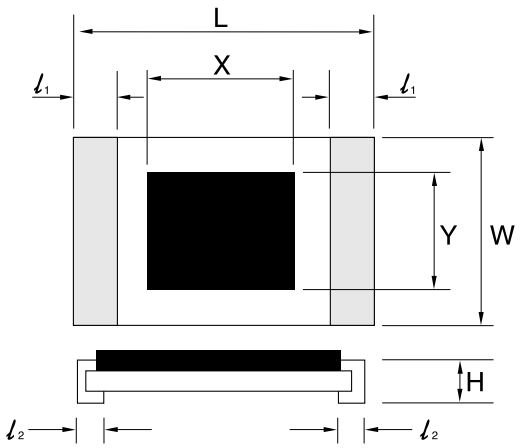
* Please specify wattage when power rathing at the mark(*) is required at the time of ordering.

TRIMMABLE CHIP RESISTOR

FEATURES

- Available in use of function trimming.
- Compatible with both wave and reflow soldering.
- Highly stable in auto-placement surface mounting application.
- Excellent eletrical characteristic.

DIMENSIONS

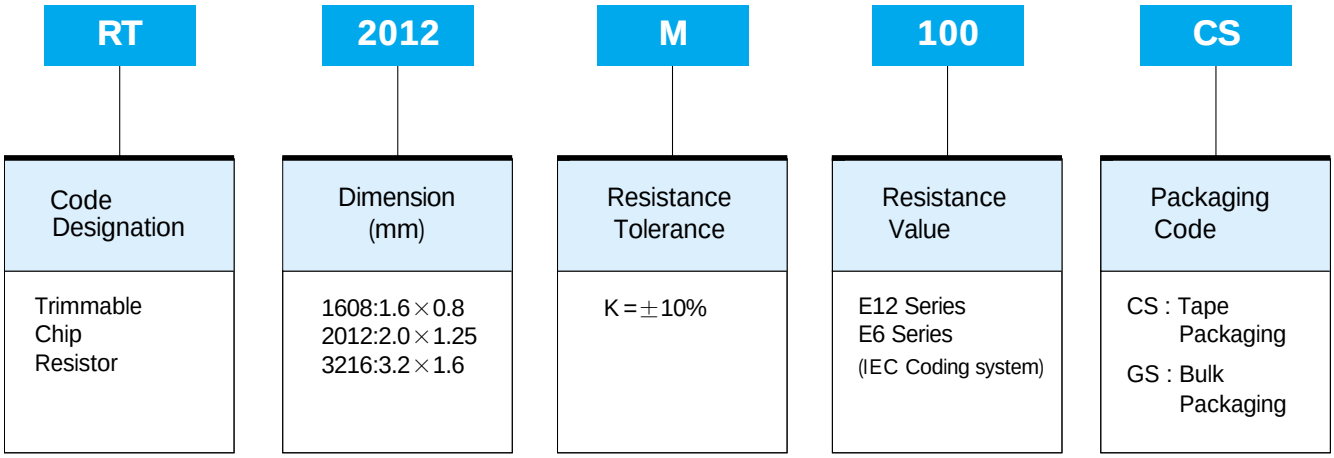


X, Y : Trimming area

(Unit : mm)

TYPE	L	W	H	l_1	l_2	X	Y
RT1608	1.60±0.10	0.80±0.15	0.45±0.10	0.30±0.20	0.35±0.10	0.50±0.10	0.40±0.10
RT2012	2.00±0.20	1.25±0.15	0.50±0.10	0.40±0.20	0.35±0.20	0.70±0.10	0.60±0.10
RT3216	3.20±0.20	1.60±0.15	0.55±0.10	0.45±0.20	0.40±0.20	1.30±0.10	1.00±0.10

GENERAL SPECIFICATION



* RT:DIP Type(Major)

RATING

Type	Power Rating	Working Voltage (MAX)	Over load Voltage (MAX)	Resistance Range	Operting Temperature Range	Rating Ambient Temperature	Temperature Coefficient
RT1608	1/16 W	50 V	100 V	1~10 MΩ	-55 ℃ ~+125 ℃	+70° C	±200ppm/ °C ±300ppm/ °C
RT2012	1/10W	100 V	200 V	1~10 MΩ			
RT3216	1/8W	200 V	400 V	1~10 MΩ			
	1/4W	200 V	400 V	1~10 MΩ			

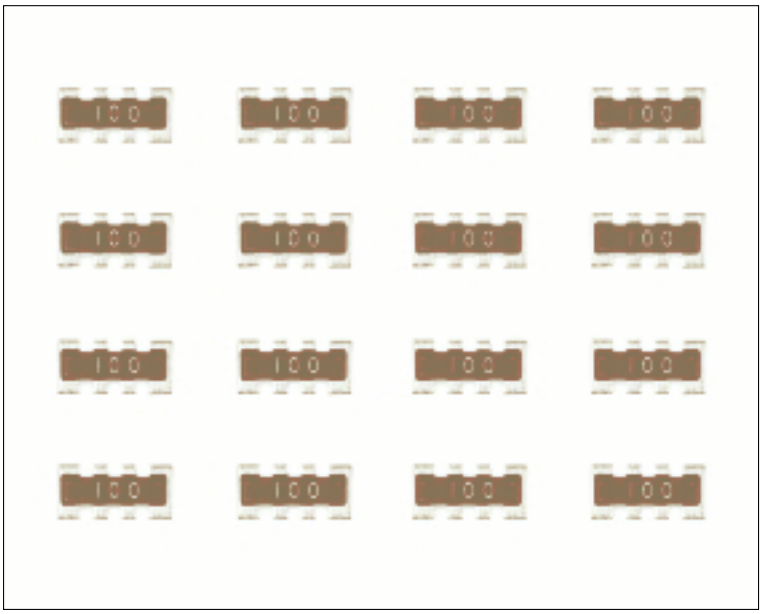
PACKAGING

- The Chip Network Resistors can be supplied with packaged carrier tape for effective use in SMD machine.
- All Reel taping specifications are in accordance with EIAJ RC-1009.
- Standard Quantity :

7 inch reel	5,000/1 reel
13 inch reel	20,000/1 reel

- Chip Resistor for Bulk shall be in the polyethylene bag and Quantity of the Chip Resistors in bag is determined by customer orders.(Standard Quantity : 5,000EA)

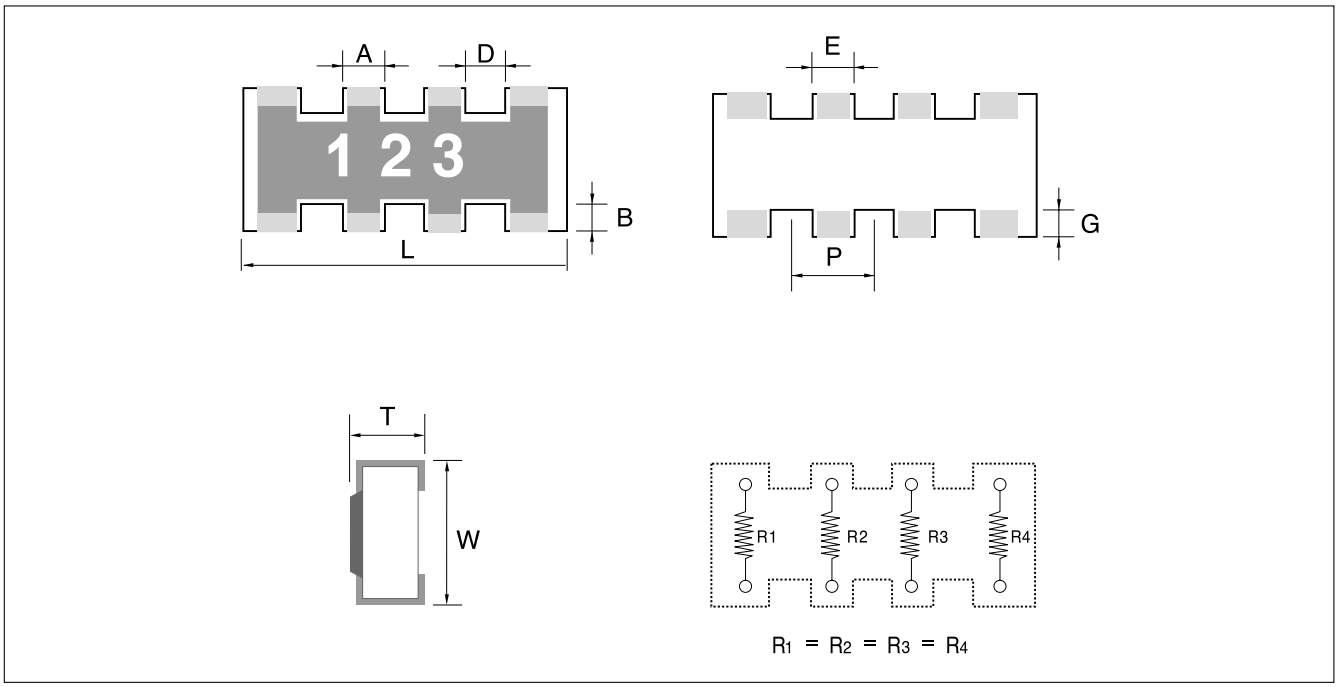
R/R TYPE CHIP NET WORK RESISTOR



FEATURES

- High density mouting
- Improvement of placement efficiency.
- Automatic placement.

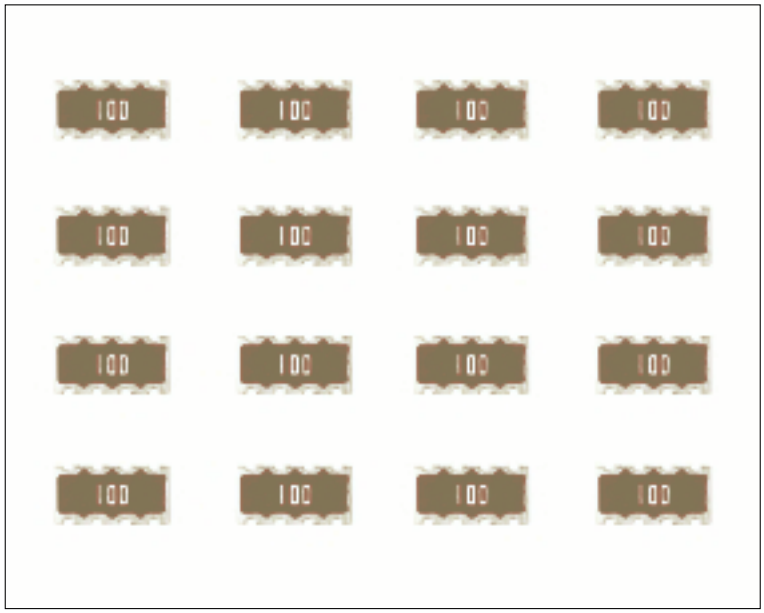
DIMENSIONS



UNIT [mm]

TYPE	L	W	T	A	D	B	P	E	G
RR164P	3.2±0.2	1.5±0.2	0.5±0.2	0.5±0.2	Max 0.16	0.25±0.2	0.8±0.15	0.5±0.2	0.25±0.2

R/R TYPE CHIP NET WORK RESISTOR



FEATURES

- High density mouting
- Improvement of placement efficiency.
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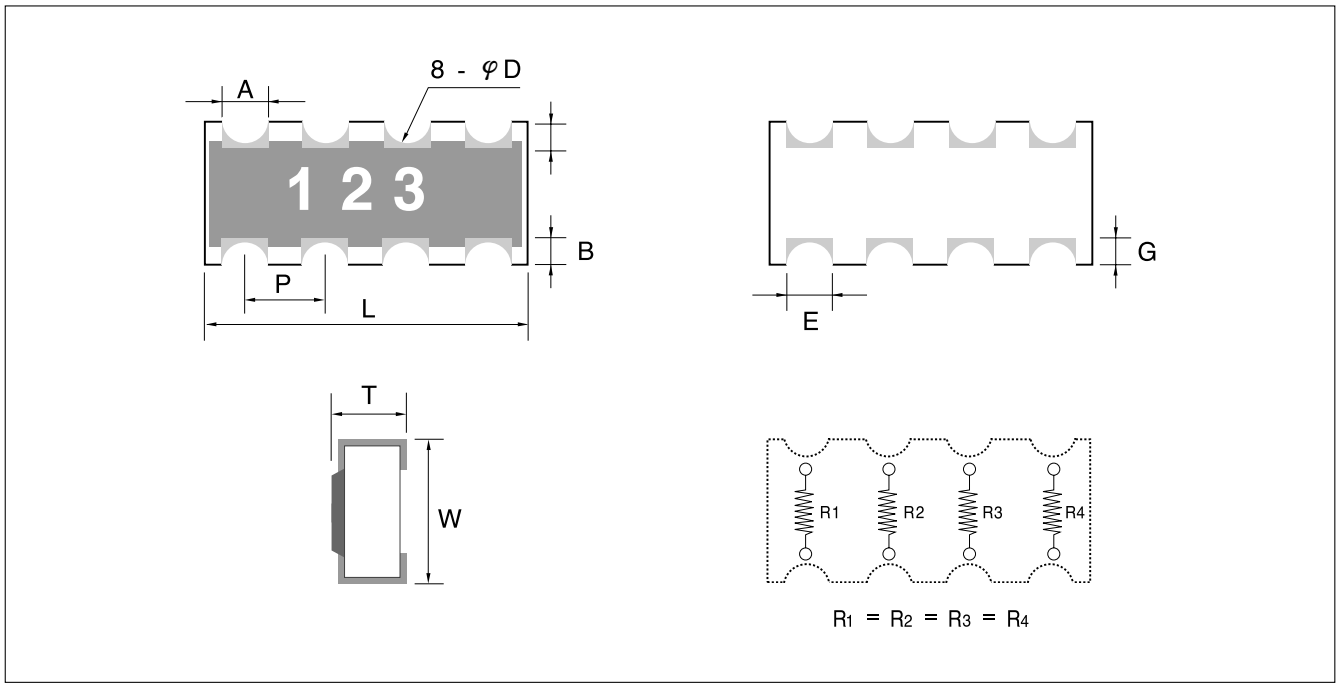
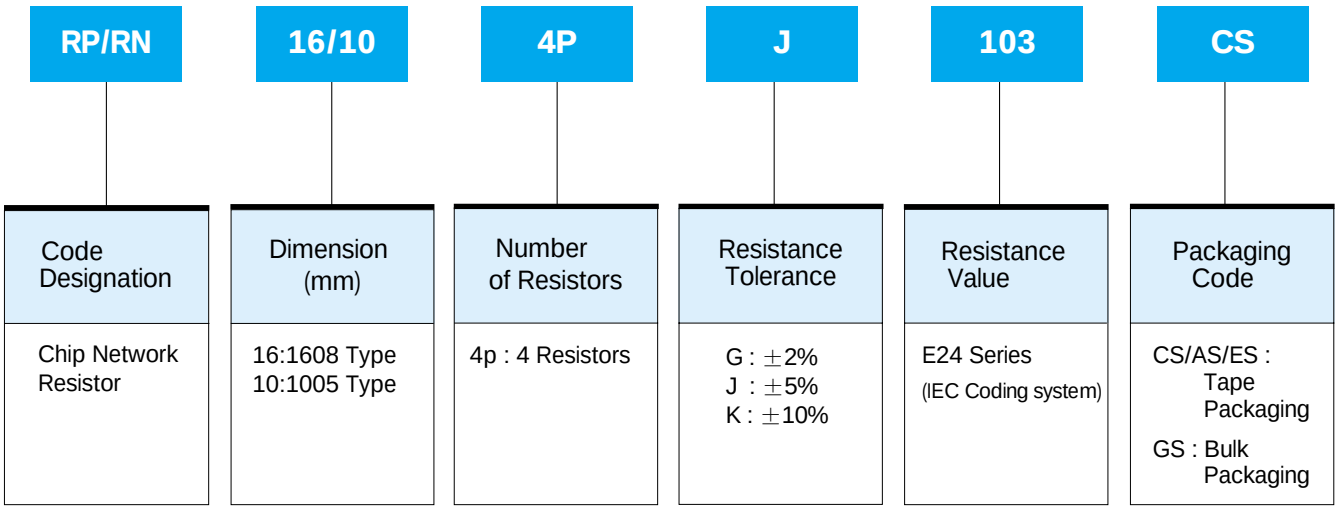
DIMENSIONS



UNIT [mm]

TYPE	L	W	T	A	D	B	P	E	G
RN164P	3.2±0.2	1.6±0.2	0.6±0.1	0.45±0.1	0.3±0.1	0.3±0.2	0.8±0.1	0.45±0.1	0.40±0.15

PARTS NUMBERING SYSTEM



* RP, RR : Dip Type(Convex Type)
* RN : Through Hole Type(Concave Type)

RATING

Type	Power Rating	Working Voltage (MAX)	Overload Voltage (MAX)	Resistance Range	Operting Temperature Range	Rating Ambient Temperature	Temperature Coefficient
RP104P	1/16W	50V	100V	10~1M	-55~125°C	+70°C	±250 PPM/°C
RP164P	1/16W	50V	100V	10~1M	-55~125°C	+70°C	±250 PPM/°C
RN164P	1/16W	50V	100V	10~1M	-55~125°C	+70°C	±250 PPM/°C

PACKAGING

- The Chip Network Resistors can be supplied packaged carrier tape for effective use SMD machine.
- All Reel taping specifications are in accordance with EIAJ RC-1009.
- Standard Quantity :

7 inch reel	5,000EA/1 reel
10 inch reel	10,000EA/1 reel
13 inch reel	20,000EA/1 reel(15,000EA/1reel)

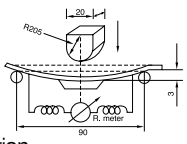
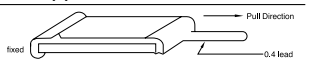
- Chip Network Resistor for Bulk shall be in the plastic case and Quantity of the Chip Resistors in bag is determined by customer orders.(Standard Quantity : 5,000EA)

CHARACTERISTICS PERFORMANCE

ELECTRICAL CHARACTERISTICS

Item	Specification	Test Method
Direct Current Resistance	Within the regulated resistance tolerance. Jumper chip ≦50 ㏁	Applying time:within 5 sec Resistance range(Ω) / Max test voltage(V) R＜100 : 0.3 100≦R＜1K : 1.0 1K≦R＜10K : 3 10K≦R＜100K : 10 100K≦R＜1M : 25 1M≦R : 50
T.C.R(Resistance Temperature Characteristic)	1≦R＜10 :+300ppm/℃ -200ppm/℃ 10≦R＜1M :±100ppm/℃ 1M≦R≦10M :±300ppm/℃	Test temperature(℃) (20)→(-55)→(20)→(125)→(20) T.C.R(ppm/℃) = (R-Ro)/Ro×1/(T-To) ×10^6 T = 20(℃) T = Test temperature(℃) Ro = Resistance at room temperature(Ω) R = Resistance at T(Ω)
Short-time Overload	△R : ≦±(1%+0.1Ω) of the initial value Visual : No evidence of mechanical damage Jumper chip : ≦50 ㏁	Apply 2.5 times rated voltage for 5sec. Wait 30 minutes at room temperature and measure the resistance value.
Intermittent Overload	△R : ≦±(3%+0.1Ω) of the initial value Visual : No evidence of mechanical damage Jumper chip : ≦50 ㏁	Perform 10,000 cycles at 2.5 times RCW or the Max. over load voltage ON(2.5 times rated volage) : 1 sec OFF : 25 sec Have stabilization time of 30 minutes without loading and measure resistance.
Dielectric withstanding Voltage	No evidence of mechanical damage.	Apply AC 500V for 1 minute. 1005(1/16W), 1608(1/16W):Apply AC 100V for 1 minute
Insulation Resistance	Over the 1000 ㏁	Apply DC 500V for 1 minute. 1005(1/16W), 1608(1/16W):Apply DC 100V for 1 minute

MECHANICAL CHARACTERISTICS

Item	Specification	Test Method
Solderability	Coverage : ≧95% each termination. Visual : No crack of termination parts and ceramic exposure of surface by melting	After immersing in flux. dip into the 235±5℃ molten solder for 2±0.5 sec Solder : S63A(KSD 6704) Flux : ROSIN(KSM 2951) Flux is the composition of ROSIN and the methanol Weight rate of ROSIN is about 25%
Bending Test	△R : ≦±(0.5%+0.05Ω) of the initial value Visual : No evidence of mechanical damage.	After soldering resistor on the PCB, 3mm of bending shall be applied for 10 sec. Material of PCB : Glass Epoxy Thickness : 1.6mm Measure resistance during load application 
Terminal Strenght	Load pull : ≧0.5kg 1005(1/16W), 1608(1/16W)≧0.3kg	pull Direction fixed 0.4 lead 
Terminal Strenght	△R : ≦±(1%+0.05Ω) of the initial value Visual : No evidence of mechanical damage.	Immerse in molten solder at 260±5℃ for 10±1 sec. Preheat and soldering Procedure Temperature(℃) / Time(sec) 80 - 100 : 120 150 - 180 : 120 260 + 5 : 10 150 - 180 : 60 80 - 100 : 60 Solder : S63A(SSD 6704) Flux : The composition of ROSIN (KSM295)25% and methanol (KSM 1658)75%
Anti-Vibration Test	△R : ≦±(1%+0.05Ω) of the initial value Visual : No evidence of mechanical damage.	2 hours each in X, Y, and Z axis(toyal 6 hours) 10 to 55 Hz sweep in 1 minute ampiltude.

ELECTRICAL CHARACTERISTICS

<table>
<tr><th>Item</th><th>Specification</th><th>Test Method</th></tr>
<tr><td>Low Temperature exposure</td><td>△R : ≦±(3%+0.1Ω) of the initial value.
Visual : No evidence of mechanical damage.</td><td>Dwell in -55℃ chamber without loading for 1000±12 hours
Dwell for 60 minutes at Room temperature and
Measure resistance value.</td></tr>
<tr><td>Temperature Cycle</td><td>△R : ≦±(1%+0.1Ω) of the initial value.
Visual : No evidence of mechanical damage.</td><td>Perform 100Cycles as follows.
<table>
<tr><th>No.</th><th>Temperature(℃)</th><th>Time(min)</th></tr>
<tr><td>1</td><td>-55±3</td><td>30</td></tr>
<tr><td>2</td><td>20±3</td><td>15</td></tr>
<tr><td>3</td><td>125±3</td><td>30</td></tr>
<tr><td>4</td><td>20±3</td><td>15</td></tr>
</table></td></tr>
<tr><td>Load Life in Moisture</td><td>At R <10Ω △R : ≦±5%
At R <1 MΩ △R : ≦±(3% + 0.1Ω)
At R ≧1 MΩ △R : ≦±5%
Visual : No evidence of mechanical damage.</td><td>Temperature : 40±2℃
RH : 90~95%
Applying rated voltage for 90 minutes “ON” and 30minutes”OFF”
Duration : 1000 hours
Dwell in Room temperature for 1 hour and measure resistance value.</td></tr>
<tr><td>Load Life in high Temperature</td><td>At R <10Ω △R : ≦±5%
At R <1 MΩ △R : ≦±(3% + 0.1Ω)
At R >1 MΩ △R : ≦±5%</td><td>Temperature : 70±3℃ at rated voltage.
Applying rated voltage for 90 minutes “ON” and 30minutes”OFF”
Duration : 1000 hours
Dwell in Room temperature for 1 hour and measure resistance value.</td></tr>
<tr><td>Heat Resistance (High Temperature Exposure)</td><td>△R : ≦±(3%+0.1Ω) of the initial value.
Visual : No evidence of mechanical damage.</td><td>Dwell in 125±3℃ chamber without loading for 1000±12 hours
Dwell in Room temperature for 1 hour and measure resistance value.</td></tr>
</table>

PACKAGING

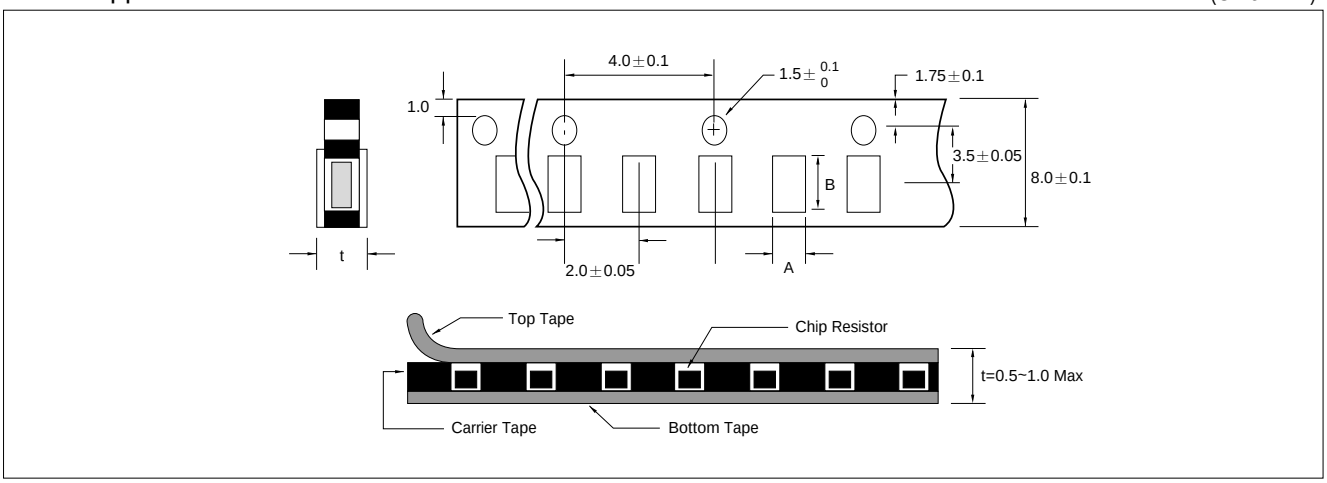
- The Chip Resistor can be supplied with packaged carrier tape for effective use in SMD machine.
- All Reel taping specifications are in accordance with EIAJ RC-1009.
- Standard Quantity :

REEL SIZE	1005	1608, 2012, 3216	5025, 6432
7 inch reel	10,000EA/1 reel	5,000EA/1 reel	4,000EA/1 reel
10 inch reel	-	10,000EA/1 reel	-
13 inch reel	40,000EA/1 reel	20,000EA/1 reel	15,000EA/1 reel

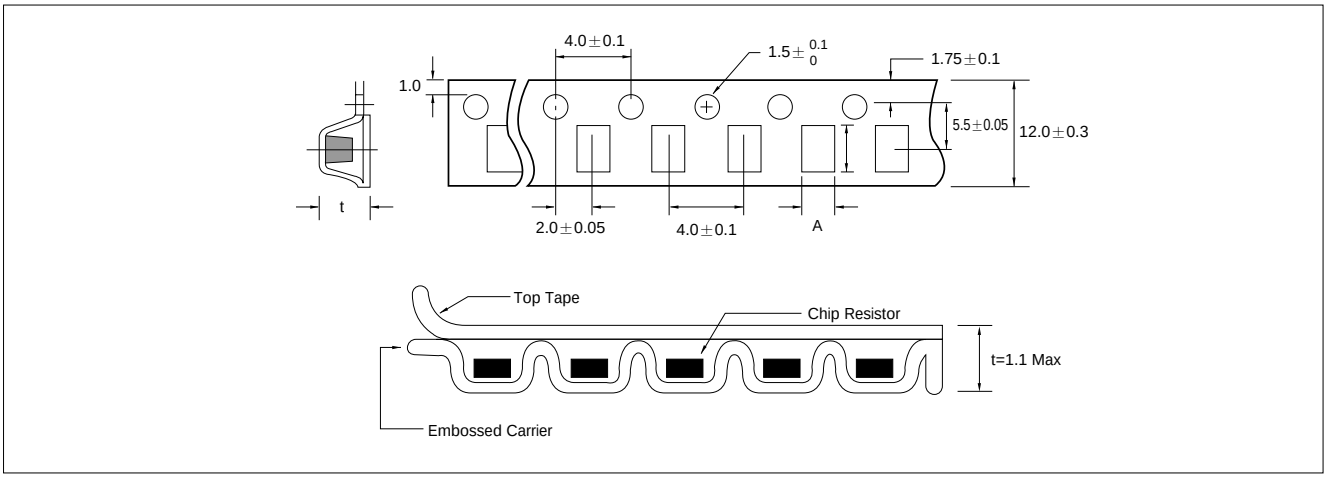
- Chip Resistor for Bulk shall be in the plastic Quantity of the Chip Resistors in bag is determined by custom orders.(Standard Quantity : 5,000EA)

CARRIER TAPE DIMENSIONS

▸This is applied to 1005 series. (Unit: mm)



▸This is applied to 5025, 6432 series.

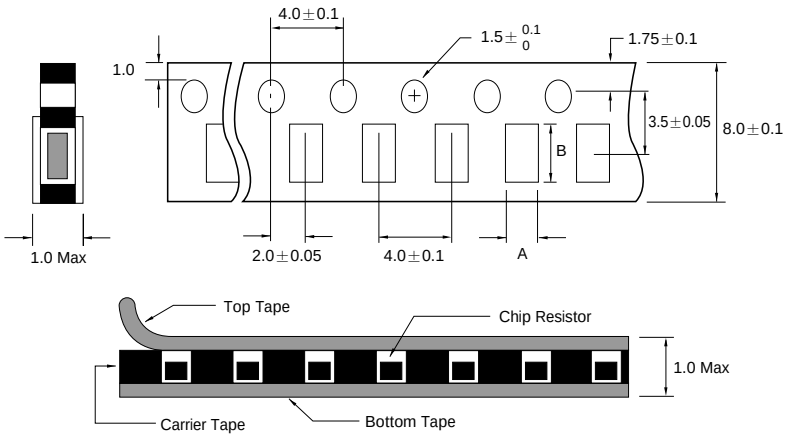


• WINDOW DIMENSIONS

(mm)

ITEM / SIGN.	RC 1005 (1/16W)	RC 5025 (1/2W)	RC 6432 (1W)
A	0.7±0.10	2.80	3.50±0.10
B	1.20±0.10	5.32±0.20	6.75±0.10
t	0.5(MAX)	1.10(MAX)	1.10(MAX)

▸This is applied to 1608, 2012, 3216, 3225 series (Unit: mm)

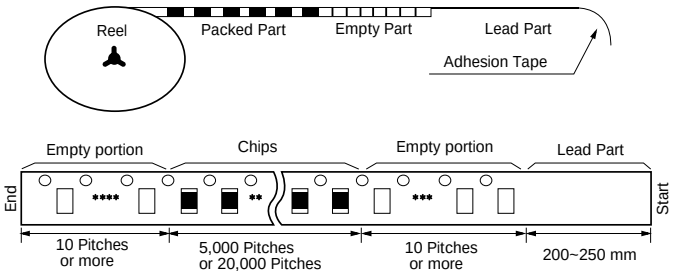


• WINDOW DIMENSIONS

(mm)

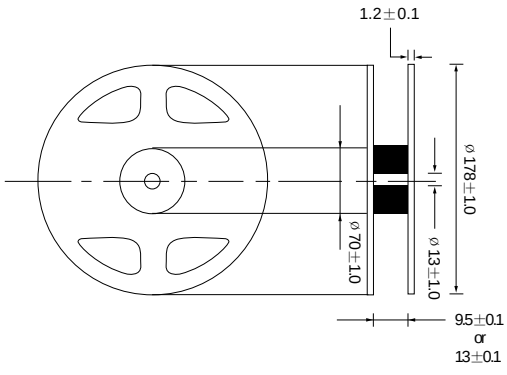
ITEM / SIGN.	RC 1608 (1/16W)	RC 2012 (1/10W)	RC 3216 (1/8, 1/4W)	RC 3225 (1/4W)
A	1.10±0.20	1.65±0.20	2.00±0.20	2.90±0.20
B	1.90±0.20	2.40±0.20	3.60±0.20	3.60±0.20
t	0.90(MAX)	1(MAX)	1(MAX)	1(MAX)

TAPING METHOD



REEL DEMENSIONS

(Φ178mm : 7 inch)



(Φ330mm : 13 inch)